



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

**To:** Susan Lewis, Director  
Registration Division  
Office of Pesticide Programs

**From:** Marion Johnson, Chief  
Minor Use and Emergency Response Branch  
Registration Division

*Marion Johnson* 7/12/16

**Subject:** Repeat Section 18 Emergency Exemption Requests for Bifenthrin on Apple, Peach, and Nectarine to Control the Brown Marmorated Stink Bug in New York and North Carolina

This is the fifth year that emergency exemption requests have been submitted for the use of bifenthrin on apple, peach, and nectarine to control the brown marmorated stink bug (BMSB). Exemptions for this use were authorized to DE, MD, NC, NJ, NY, PA, VA, and WV for the past four years (2012-15, except for NY, who did not request in 2012), and recently authorized for this year to DE, MD, PA, VA, and WV. The use patterns requested this year are identical to those from the past four years. The following table summarizes acres authorized for treatment and estimates of actual acres treated under the past exemptions. Acreage treated has generally been lower than requested. For 2013, State contacts indicated that while BMSB populations were not necessarily lower in all areas, the higher availability of wild alternative host plants may have alleviated some of the pressure and damage to fruit trees (the years prior had drier conditions leading to less available wild host plants).

<i><b>Bifenthrin Section 18s for Apple, Peach, and Nectarine for BMSB Control</b></i>					
<i>State</i>	<i>Acres Authorized</i>	<i>Treated 2012</i>	<i>Treated 2013</i>	<i>Treated 2014</i>	<i>Treated 2015</i>
DE	415	-0-	-0-	-0-	-0-
MD	3,570	2,500	3,000	2,900	2,700
NC	4,000	-0-	250	350	400
NJ	8,100	100	1,840	3,080	Not rec yet
NY	5,900	--n/a--	1,239	1,239	1,642
PA	24,973.4	725	144	144	-0-
VA	29,000	5,211	1,635	4,116	5,050
WV	5,986	125	-0-	1,960- 4,900*	1,960- 4,900*

*Acres treated are estimates based on registrant sales data*

*\*WV number based on low and high rates authorized using sales data.*

The listed states, with the exception of New York, have also requested and received use of dinotefuran under emergency exemptions since 2011. Michigan also obtained use of dinotefuran for the first time in 2013-14, but has not requested bifenthrin.



The BMSB, a recent invasive pest, continues to pose a threat to pome and stone fruit trees in the US. There are no known natural enemies in the US to help regulate populations, and limited available pesticide controls with no registered products that will provide adequate and suitable season-long control. In 2010, the BMSB populations occurred at damaging levels in the US, which led to USDA naming it a national priority, and forming a workgroup to research management of the BMSB.

BEAD's review of the 2012 requests indicated that an emergency condition exists with respect to control of BMSB on stone and pome fruit, and without adequate control, significant economic losses were likely. BEAD was consulted for the 2013 request from NY, and indicated that under similar pest pressure, the emergency condition and expected losses would be similar, and significant economic losses would be likely. The provisions and use conditions are analogous to the past authorizations for all of the states and other aspects of the situation are essentially the same.

EFED also evaluated the 2012 requests and determined that the anticipated risks are minimal for plants, mammals, and birds, although concern may exist for aquatic organisms and pollinators. EFED noted that estimated risks from the proposed use would be similar to those posed by section 3 registered uses. EFED noted the requirements on the section 3 labels for buffer zones and vegetative strips around aquatic environments, and recommended that these be strictly followed, along with provisions on the section 18 use directions related to protection of pollinators.

**For further details, the Decision Memorandum for the 2012 requests is attached.**

In 2014, HED provided updated acute dietary risk estimates using 2012 preliminary PDP sampling data, new percent of crop treated figures (2014) for apple, peach, nectarine, and pear, and incorporating processing factors; all estimates remain below the Agency's level of concern (<100% aPAD). The updated estimates are as follows: for the most highly exposed population subgroup, infants (<1 year old) 55.5% of the aPAD (previously 29%); and for the general US population, 7.1% of the aPAD (previously 5%). Non-dietary risks remain unchanged from HED's 2012 assessment. The assessment also included Michigan, which had not been included in their 2012 assessment for the initial requests. There are time-limited tolerances established for apple, peach, and nectarine at 0.5 ppm in connection with past exemptions and they are adequate to support are set to expire on December 12, 2018 and are adequate to cover any residues that might result from the uses under section 18. To better define the expected residues, PDP collected additional data during 2014, which is currently at EPA and under review. HED indicated, based upon preliminary examination of the data, that the residues detected appeared to all be significantly lower than those used in the previous risk assessment. Thus, it is likely a new risk assessment will show lowered risk compared to the estimates given here.

MUERB has confirmed that no new alternatives exist for control of the BMSB in pome and stone fruits, and there do not appear to be any outstanding risk data that might undermine the previous safety finding. The MUERB analyst confirmed that these requests meet the criteria for the re-certification program.

IR-4, in cooperation with the registrants, is supporting registration of these uses. Residue trials were completed and the final report has been signed. Submission to EPA is expected in 2016.

Therefore, I recommend that the attached actions be approved. In the event that these emergency uses are requested next year, MUERB is recommending that they be retained on the re-certification eligibility list. The attached letters convey a preliminary determination of eligibility for the 2017 growing season.